

GPO and Secure Document Production



Prepared Remarks from ROBERT C. TAPELLA, *Public Printer of the United States*
2009 Graphics of the Americas Exposition and Brand Protection Conference
Miami Beach, FL | February 27, 2009



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Good morning. My name is Bob Tapella. I am the Public Printer of the United States. It's wonderful to be here in beautiful Miami Beach, at the 2009 Graphics of the Americas Exposition and Brand Protection Conference

The Public Printer serves as the Chief Executive Officer of the United States Government Printing Office. Our mission is to keep the American people informed about the work of their Government.

GPO is one of the largest printing and digital information factories in the world and certainly one of the largest print buyers, too.

Benjamin Franklin held the title of "Publick Printer" for the colonies of Pennsylvania and Delaware before the American Revolution.

More than two hundred years later, I was entrusted with the same responsibility: to record the words and actions of our government and to make certain that these documents of our democracy are made widely available to the public and kept in perpetuity.

Each and every day, I remind myself of this incredible opportunity and responsibility. There is a portrait of Ben Franklin hanging over the fireplace in my office, and he looks over my shoulder every day. I'm certain Ben would be fascinated by just how much our industry has evolved and, perhaps more importantly, where we're going.

This morning, I will begin by talking about GPO and the roles we play. Then I'd like to talk about the U.S. passport program and brand security.



GPO Yesterday and Today



When GPO was established in 1860, printers set type by hand under candlelight, printing presses were driven by steam, and deliveries each morning to the Capitol were by horse-drawn cart.

Since then, every Public Printer has had to adapt the agency to new technologies and new ways of meeting the needs of Congress, Federal agencies, and the public. Today, every day, GPO delivers the *Congressional Record*, the *Federal Register*, and numerous other products and services — in print and digitally — while also building the digital tools of the future that will enable our Government to work more effectively and efficiently.

Our mission and the notion of an informed public is one of the great ideas to emerge in the past millennium. It's an idea that is directly related to the single greatest invention of that era: Johann Gutenberg's development of moveable type some 570 years ago.

This was not simply a method of producing ink-on-paper more economically. What Gutenberg did was create a means for easily transferring language to a medium for widespread dissemination. The technologies we have today for accomplishing the same end — computers, e-mail, online systems, and even offset web presses — are all indebted to his vision.

Today, GPO plays four primary roles:

- GPO plays an integral role in the legislative and regulatory process by the daily work we do for the Congress and the Administration. We publish what we call the “Official Journals of Government,” which include the equivalent of two daily newspapers: the *Congressional Record* and the *Federal Register*. We process work for Senate and House bills, reports, hearings, documents, laws, and other congressional publications. We also provide assistance to Members and officials of Congress, its committees, and support staff regarding the printing, binding, and electronic availability of the numerous products required to carry out their legislative schedule and daily operations.
- GPO plays a facilitating role as we work with the American library community to provide free, open, and permanent public access to the documents of our democracy through the Federal Depository Library Program. Since 1813, depository libraries have safeguarded the public’s right to know by collecting, organizing, maintaining, preserving, and assisting patrons with information from the Federal Government. As institutions committed to equity of access and dedicated to free and unrestricted public use, the Nation’s more than 1,250 depository libraries serve as one of the vital links between “We the People” and our Government.
- GPO plays a supportive role to all of the agencies and organizations of the Federal Government as we help them meet their printing and communication needs. This includes website design, commemorative publications, training DVD’s, and traditional printing, too. We do this much like a print broker would. Last year, we sent nearly 135,000 jobs to more than 2,000 private sector vendors in every state of the Union, plus Guam, Puerto Rico, and the Marianas Islands, with a total value of nearly half a billion dollars.
- Finally, GPO plays a critical role in our Nation’s security by producing the passports for the State Department. Although very important to GPO, security for the passport production, which now includes an electronic chip, is only one plank in our Platform of Authentication, a platform that has applicability to a host of security products GPO now produces. We have established a robust security documents program to satisfy the needs of our Federal customers. These customers come to GPO to help them authenticate permissions to access Government facilities and information; approval to use special lanes to expedite border crossing; published electronic Government documents as official and unaltered; and identity and citizenship with a U.S. passport.





It may surprise you to learn that the history of the U.S. passport began in Paris. Benjamin Franklin was among the new Nation's diplomats gathered there to sign the treaty granting American independence. At the time of the treaty, Franklin was a fixture among the powdered wigs of Paris, and in his fine fur hat he was pretty hard to miss. After the treaty was signed, Franklin remained in Paris. Impressed with the design of French travel documents, he operated a small printing press and produced the first U.S. passport. This was a pass to enter the United States, signed by Dr. Franklin. It identified the bearer as a highly trusted individual who could pass freely between America and other nations.

Could Franklin have foreseen the day when an electronic chip would affirm that a traveler was trustworthy? Knowing Franklin as a leading author, satirist, political theorist, politician, scientist, inventor, civic activist, statesman, diplomat and, yes, even a printer, maybe he could.

In the youthful days of our Nation, an official passport could be obtained with a letter from any city or state official, notary public, or justice of the peace. It wasn't until 1856 that the

Department of State established centralized control of passport applications and issuance. The Bureau of Engraving and Printing, which is a unit of the Treasury Department, produced U.S. passports when they consisted of a single engraved page. But in the 1920's, the League of Nations created an international standard for a booklet-style passport. This standard established passport size, number of pages, and other aspects of its design. Drawing on our expertise in precision printing and bookbinding, GPO was selected in 1926 to produce all U.S. passports. We've had the job ever since.





GPO

From automated numbering in the 1960's to the machine-readable passport of the 1980's, to the electronic passport of today, GPO has employed the leading technologies of each era to continuously strengthen the security of the world's most respected travel document. The story of today's electronic passport, or

e-passport, which features an electronic chip and antenna, is as much about security printing as it is about secure electronics.

The intricate design of each e-passport page is itself a security feature. Some security features in the e-Passport booklet are visible to the naked eye, while others are not. Embedded in the e-passport is an integrated circuit, or chip, which has been designed, tested, and proven secure under the most challenging conditions. Before it leaves GPO, the chip in each e-passport is locked to prevent tampering. At the Department of State, the chip is unlocked and then loaded with the same personal information printed on the data page of a non-electronic passport. You can spot an e-passport by the chip logo stamped on the cover.

Nearly 50 countries currently issue electronic passports. Each country is a member of ICAO: the International Civil Aviation Organization, a United Nations organization. ICAO sets the standards for many aspects of air travel, including e-passports. By early 2001, GPO and its international counterparts had already begun the e-passport development process.



Then, one morning in September of that year, the world changed. 9/11 made e-passports imperative, and ensuring the integrity of Government credentials became one of our Nation's highest priorities.

As America restored itself, Congress passed the Enhanced Border Security and Visa Entry Reform Act of 2002. This Act established requirements for secure, Government-issued identity credentials. GPO was quick to respond. Working with the Department of State, the first e-passport was issued in 2005. Then, mass production began. By the end of 2008, GPO had produced more than thirty million e-passports. GPO and



the Department of State have worked together to stay ahead of traveler demand. While it's true that in today's economic climate, international travel has been sharply reduced, the U.S. passport is still the most important proof-of-citizenship credential available.

Today, GPO manufactures many different kinds of e-passports. The three most prominent are the official, diplomatic, and tourist passports. Beyond passports, GPO produces other secure credentials, such as the immigration booklet. It's issued to non-citizens who are authorized to travel repeatedly to and from the United States. GPO also produces a credential for the U.S. Coast Guard. It verifies the identity, training, and qualifications of crew members aboard merchant ships.

GPO and Secure Federal Credentials



The success of the e-passport and other travel booklets has enabled GPO to combine our traditional strengths in security printing and design with proven electronics to create secure Federal credentials like smart cards. Just as a passport controls access at U.S. ports of entry, Federal smart cards control access to Government facilities, networks, information, and other resources. Starting with a blank secure card, embedded micro-electronics

may include an integrated circuit and an antenna. Printed security features are added to the card, usually on both sides. Only when personalized information is encoded on the chip and printed or laser engraved on the card does a secure card become a secure credential.

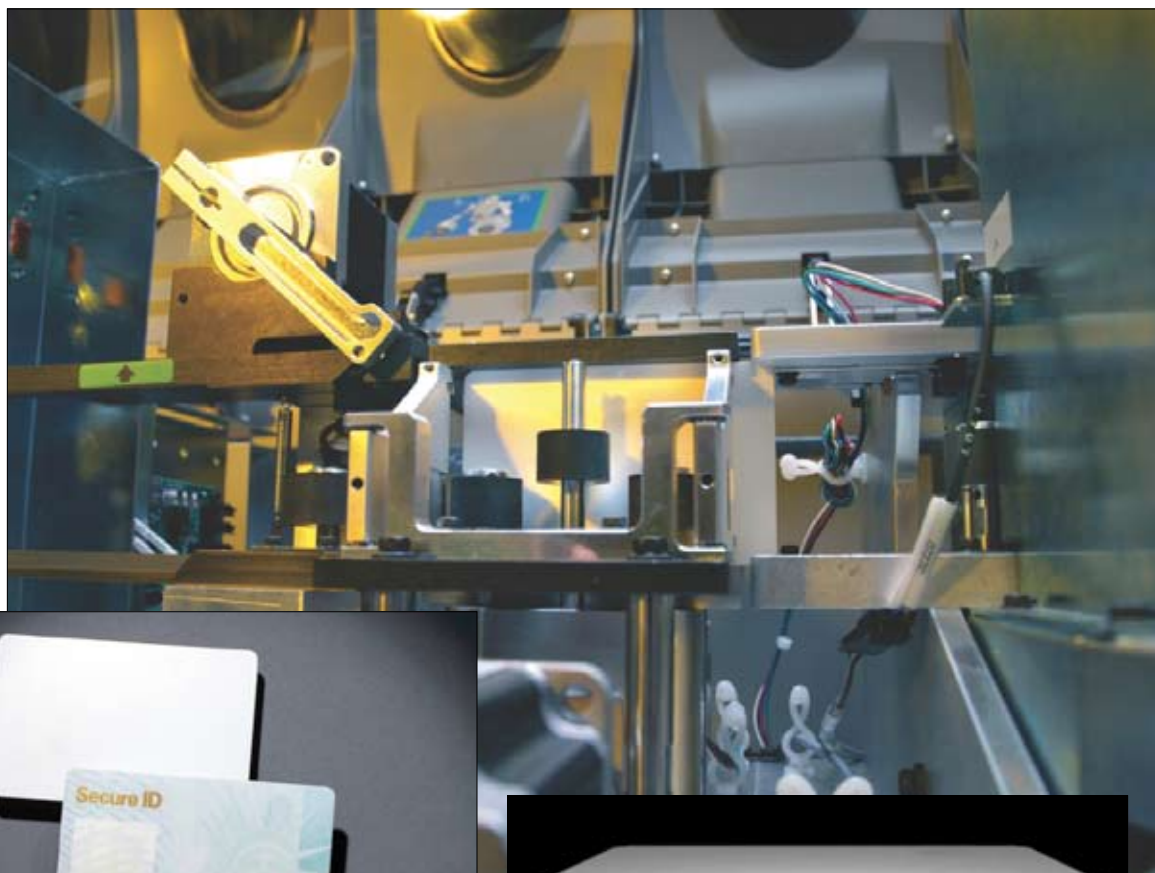
The transformation from secure card to secure credential takes place at the GPO's secure credential center, where thousands of secure Federal credentials are personalized, affixed to letters or inserts, and prepared for mailing each day. Each secure credential is examined and tested for accuracy as part of our quality assurance process. GPO offers a wide range of materials for secure card construction, including laminates, substrates, adhesives, and electronics. Different customer requirements call for different combinations of materials.

GPO customers rely on our recommendations, and on our expertise, in secure design and manufacturing. One customer who relies on GPO expertise is the Department of Homeland Security (DHS). For DHS, Customs and Border Protection, GPO designed, manufactured, and personalized cards for the Trusted Traveler Program. Cardholders are pre-approved, low-risk travelers who are authorized to use dedicated lanes to expedite border crossing between the United States, Canada, and Mexico. The convenience of the Trusted Traveler card has been promoted in a national television ad campaign.

To protect American citizens, the production of every secure document, every secure credential, and every secure card is governed by a secure supply chain. At GPO, the entire supply chain remains under Government control, from supplier to the shop floor to delivery and beyond.

Each security document is tracked by serial number. Our Federal customers enjoy the benefit of one point of contact for all phases of the secure credential process. Confidence comes from knowing that the entire process takes place in Government-controlled





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facilities, performed or managed by Government employees with the necessary clearances.

Whether you're responsible for protecting Government information, personal identity, or the integrity of a trademark, the sophistication of today's global counterfeiters virtually guarantees that your brand will be vulnerable on many fronts. Multi-layered threats demand a multi-layered defense. To create a defense in depth, you need security that's built-in on multiple layers of printed and non-printed material. Achieving balance in security requires sound judgment. The most effective secure documents are complex enough to be fraud-resistant but simple enough for quick validation by visual or electronic means. In multi-layered security, each layer increases the complexity of the document, thereby strengthening its resistance to counterfeiting or fraudulent use.

Secure ID



At GPO, our experts create secure documents by integrating layers of secure card design, secure materials selection and printing, secure data management, secure personalization, and secure fulfillment. A wide range of materials can be specified to balance risk, security, and cost. These include substrates like polyvinyl chloride, polycarbonate, and Teslin. GPO experts skillfully combine adhesives and chemical security agents to ensure document integrity and long life.

Some of the inks used for printing secure documents are proprietary to GPO. Others have color-shifting properties to inhibit attempts at counterfeiting. Secure design extends even to the selection of threads to stitch and reinforce the binding of our secure booklets.

Multiple layers of printed and non-printed material are fused together to create the most secure documents in Government today. Our blank slate begins as a plain white card. We add layers of secure electronics, security graphics and printing, optically variable inks and devices, personalized data, digital printing, tactile features, and lamination. This creates a highly fraud-resistant document that's tough to counterfeit but easy to authenticate.

Obviously, I can't go into detail about all of the security features our designers employ, but by listing just a few of them, and talking about them generically, you'll get an idea about some of the features in our arsenal to fight counterfeiting and fraudulent use. For example, when tilted in multiple directions, optically variable ink shifts from one color to another.



Under ordinary viewing conditions, microtext appears to be a simple line or circle. But in reality, it's so much more. Clear designs can be raised above the surface of a separate layer on the face or back of a secure document. The document can be easily authenticated simply by feeling for the raised surface.

There are other security options. Variable-width fine-line guilloche patterns can be printed in custom colors. Gradient effects are achieved by varying the width of lines and printing them in precise register. Optional electronic security features include contact or contactless programmable chips, antennae, or other microelectronic communication devices. Integrated circuits can be embedded on one or more layers of a secure document or credential. This is the kind of work that makes GPO a natural for the business of secure printing.

A number of Federal agencies have placed their trust in GPO for our multi-layered expertise. You'll find our secure documents supporting programs in defense, law enforcement, border crossing, health benefits, and citizenship.





More than once in my remarks this morning, I've mentioned that GPO's capabilities have made us a natural resource for the security design, security printing, and secure electronics used to produce secure documents today.

The transformation of GPO—from a printer of ink on paper to a digital delivery provider of Government information—is largely complete. But we are still one of the largest printers in America—one of the largest printing and digital information factories in the world. GPO recently completed printing of the “Plum Book,” a listing of about 8,000 policy and supporting positions. The book provides an index and description of Government positions open for hire by the new Administration. You might think of it as the President Obama's 209-page help-wanted ad. The Plum Book has been a best-seller in GPO's bookstore, and it has had more than a half million hits on GPO's Federal Digital System.

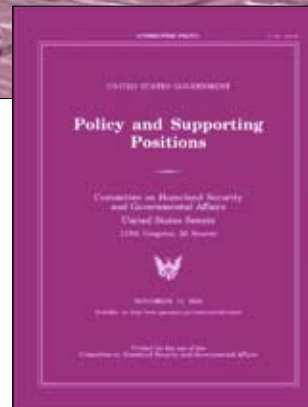
Last year, President Bush submitted *The Budget of the U.S. Government for FY 2009* to Congress electronically. This is the first time in history that such an important Government document was delivered electronically. I had the pleasure of delivering the e-Budget to Jim Nussell, then director of the Office of Management and Budget. GPO authenticated it by digital signature, drawing on our digital document expertise to comply with the President's request. *The Budget*, in both electronic and printed formats, represents the President's priorities. GPO produces the official and authentic printed Budget as well as the electronic version.

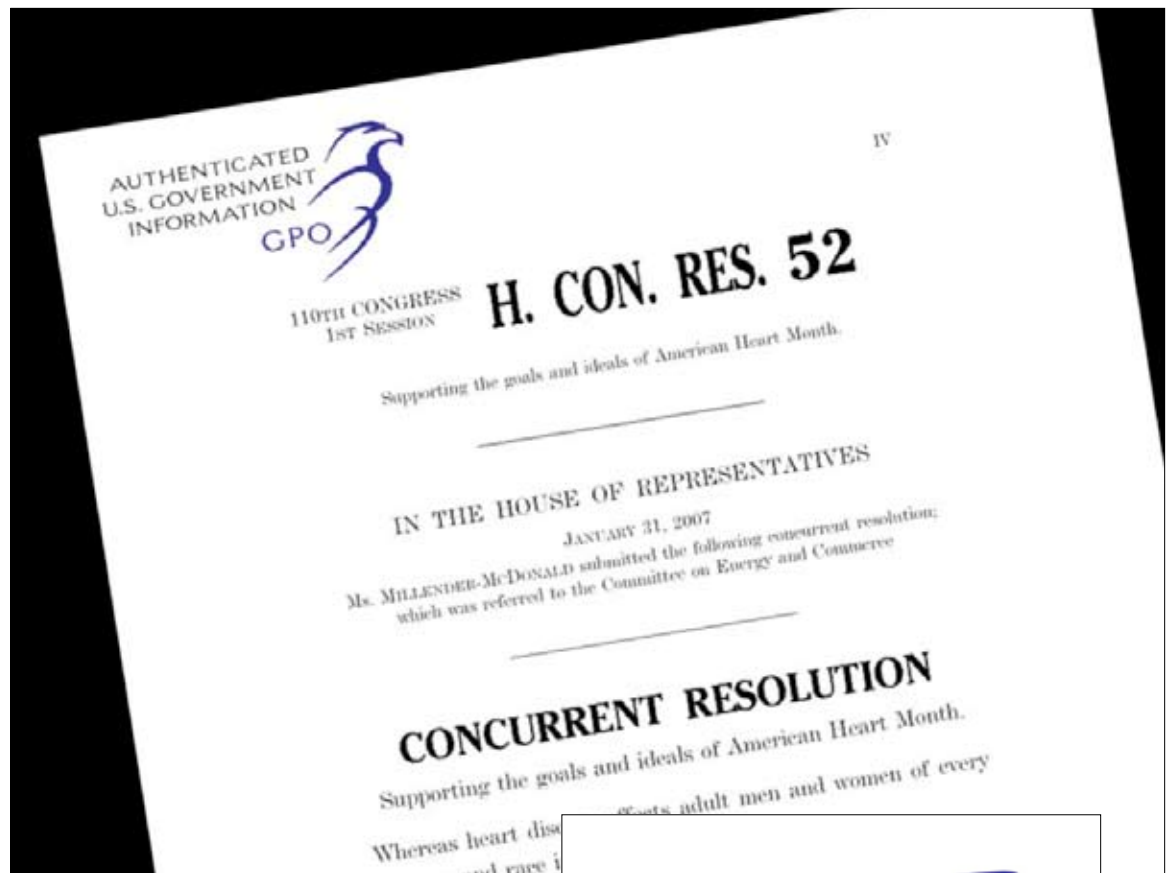
The e-Budget, like other electronic documents produced by GPO, is protected by GPO's electronic seal of authenticity. This seal verifies to anyone who downloads an electronic document that the content is official and unaltered. The seal is the visible symbol that the documents of our democracy are official—even in electronic format. It also signals GPO's

prominence as the standard of brand protection for Government information today. When the seal appears on an electronic document displayed on a computer screen, the reader can be certain that it's the genuine article. When the e-Budget was delivered to Congress bearing the GPO seal of authenticity, the President was assured that the electronic document was official and unaltered and identical to the printed version.



GPO





Like you, as we create and build secure documents, we are vigilant. We know that protecting our brand means safeguarding our end-to-end production process against the threat of compromise. As I mentioned earlier, we do this by securing the supply chain. At GPO, that chain links secure suppliers to secure design, secure materials selection, secure electronics, and secure fulfillment. Most importantly, at GPO, our secure supply chain also protects the personal identity of our citizens.

Like you, GPO knows that security is a moving target. As counterfeiters continue to learn, we must continue to innovate. That's why, to best serve our Federal customers, GPO will always seek new approaches to security graphic design, new materials for printing and construction, new technology to protect personal information, new channels for document delivery and fulfillment, and new allies from the public and private sectors, allies like you.

Thank you very much.





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